

Archaeological Parks Planning for the Purpose of Developing Cultural Tourism in Different Communities: A Case Study in Ancient Area of Burnt City of Sistan

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Abstract

Today, cultural attractions in countries are popularizing the cultural tourism and can bring about new approaches in recognition, development, and stability for the countries. Archaeological Parks as a cultural tourist attraction is a new topic to exhibit the ancient ruins in the context of nature, environment, and their surrounding perspective. The current study with the assumption that the use of tools and attractions such as the archaeological parks are key factor in the development of tourism industry, particularly cultural tourism, is trying to focus on the investigation of archaeological park and offering proper programs for the establishment and construction of these parks. Ancient civilization of Burnt City of Sistan in the South East of Iran owed its existence to Helmand River which was full of water and its Delta in the fourth and third millennium BC, and indicates the interaction between history and nature in this country over years. But, unfortunately, no proper plans have been provided to introduce this ancient civilization yet. Accordingly, the required data were collected by using analytical research method and applying attributional procedures and field measuring and the potentials of the environment, tourism, and its archaeological sites were analyzed. The results show that the natural- ancient perspective of Burnt City of Sistan according to the terrain features and its historical potentials as a precious cultural symbol can play a key role to develop cultural tourism in the region and to identify important aspects of the ancient civilization in southeastern plateau of Iran. The results of the research lead to solutions and a model to establish an archaeological park in order to achieve the objectives in the region.

Keywords: archaeological parks, cultural attractions, nature and perspective, cultural tourism, the ancient Burnt City of Sistan.

Introduction

Today in most developed countries, tourism as a dynamic industry, allocate important parts of economic and production activities (Ranjbaran & Zahedian, 2009). The impact of this industry on the developmental, social, and economic functions in the developing countries also creates opportunities for exports, exchange production, job creation, and suitable alternative for new sources of income (Ebrahimzadeh & Aghaei, 2010). The benefits from the tourism industry is not only in the economic benefits, but also it can be evaluated in different aspects including familiarizing the culture of a nation to other countries and establishing cultural exchanges among tourists and local residents (Kazemizad et al, 2010).

In this part, cultural attraction as one of the tourism resources, directs people towards the destinations in order to do cultural tourism activities (Ahmadpoor et al, 2012). Accordingly, cultural tourism means the people's traveling from their homes to places with cultural attractions. This journey is done with the motivation of achieving new information and learning activities, events and cultural products of a region and totally different cultural experiences (Saei et al, 2010). Nowadays, archaeological and historical sites are one of the major attractions to draw cultural tourists in any regions, because they show the past and present situations of a geographical region and reflect the customs, traditions and cultural values of a country (Richard, 2007).

The ancient civilization of Burnt City of Sistan as a cultural tourist attraction in the South East of Iran can express the interaction between human and nature in the fourth and third millennium BC in the region. But, unfortunately, no effective activities have been done to introduce the cultural perspective, so this natural-ancient region has been remained somewhat unknown. The present research tries to give solutions to create archaeological parks as cultural tourist attractions in the most important active region for the beginning of urbanization before the fourth millennium BC in the region of Iran.

Literature review

The concept of cultural tourism is formed by the links between geography and culture. According to statistics released by the Organization for Economic Cooperation and Development (OECD), 40% of total international trips in 2009, devoted to the issues of cultural tourism (Ahmadpoor et al, 2012). In recent decades, cultural tourism has become a new way to use leisure time in order to acquire the knowledge, experience and familiarity with the culture of various regions (Saei et al, 2010). Attracting cultural tourists means creating interest and motivation in tourists to choose specific destinations. Currently attractions based on cultural experience and historical remains are considered one of the factors affecting the cultural tourist attraction in the region. Hence, the archaeological park as a cultural tourist attraction is a new approach to show the works of ancient remains and ruins in the context of nature, environment, and their surrounding landscapes (Gross & Zimmerman 2002; Gross & et al. 2006).

In the archaeological park, the ancient-natural landscape which represents social, historical, natural, and cultural events influencing on human society in a period of history is displayed.. The idea of creating an archaeological park was firstly considered in Italy in 1999 (Mills, 1999). Based on this definition, archaeological park means the remains left from a particular historical period in the context of nature that reflects the specific, indigenous, historical, environmental, cultural values of a geographical region, and can be changed into a place to attract cultural tourists (Zifferero, 2008). The principles used in the archaeological parks, is clearly the same as open air museum principles (Marchetti, 2008). Generally, people attend the historical sites are set to move in the certain directions and by the use of training aids (guiding boards and panels) can have an understanding of the true nature of historical values while visiting the monuments and archaeological remains associated with the nature around them (Thuesen, 2008; Zifferero, 2008). Today, the nature and the landscape around historical sites as complementary attractions ancient civilizations have drawn more visitors to the archaeological parks (Doswell, 1997; Zifferero, 2008). Generally, in order to create an archaeological park in the realm of historical civilization the following four objectives are taken into consideration (Mills, 1999; Gross, 1999):

- Protection of monuments and heritage;
- The connection between nature, culture and history in the region;
- Raise the awareness of people and visitors through educational activities;
- Improving the situation of indigenous communities in terms of economic, social and political issues as a result of the development of cultural tourism in the region.

The idea of creating archaeological parks takes their first steps in Iran. Hence the results of other countries in creating archaeological parks have been utilized. For example, the design and construction of Champaner – Pavagadh Archaeological Park in India, Borobudur National Archaeological Park in Indonesia, and Tilmen Hoyuk Archaeological Park in Turkey (Bittelli 2008; Musso 2008) were investigated (ASI, 2002; Fatimah et al., 2006; Bittelli 2008; Musso 2008). In addition to the protection of ancient-natural sites, the concept of the archaeological park refers to the

sustainable development of natural and cultural tourism consistent with the educational goals (Marchetti, 2008; Zifferero, 2008).

Methodology

The method applied to the study was descriptive procedures, field measuring and aerial photos and the Figures with the scale of 1/5000. Firstly, the natural structure of the land, the formative period of burnt city, and applying strategies in different periods of city development were studied. After the recognition of the background of the site, the whole area of the case study site was divided into four zones based on the location of the applications and ancient ruins available in the range of hills in the ancient area. The border of each zone was determined on the basis of the areas with the same application. Secondly, Simon Bell's Visual Quality Assessment was used to evaluate the quality of the visual landscape and the nature in every area of the ancient area of burnt city.

The purpose of this assessment is to determine the characteristics of the landscape with respect to the visual characteristics, setting milestones, recognizing the natural and aesthetic values or perspective artifact in the current situation (Khalilnejad, 2011). Accordingly, concepts such as unity (the relationship between the components of a landscape in general), diversity (the variety and differences in landscape plan) and the spirit of the place (the unique quality specific to a place) in the form of the landscape of each zone to determine their visual attractions were analyzed. To do so, some pictures were taken from each zone based on visual indices. All photos were taken early hours in the morning by considering the background horizon from the position of the observer in each zone and milestones in the site such as excavated ruins and remains. Overall, 12 photos from the four zones with high resolution were selected and they were analyzed by the above method in order to identify the features relating to the current landscape in the structure of each zone. Afterward, the results of the capability of the landscape and nature of each zone, and also the potentials of tourism and education were separately studied.

The region under the study

Burnt City is the name of the ancient city ruins located 56 km away from the city of Zabol in the north of Sistan and Baluchestan province (Sarani, & Rezazadeh, 2011) (Figure 1).



Figure 1: The bed and limits of the region under the study

This ancient city is currently located on the left side of Zahedan to Zabol road as a range of large hills with a height of 10 to 18 feet above the surrounding land with an area of over 151

hectares. The city was an important center during the Bronze Age in Eastern Iran and there were four periods of living there between 3200 BC and 2000 BC (Figure 2). In fact, the ancient city owes its existence to Helmand River and its fertile Delta (SyedSajadi, 2003). The existence of industrial area, the density of houses, cemeteries and farms in the fertile lands around all indicate an organized system and urbanization in the region of Sistan in the fourth millennium BC (Mortazavi, 2007).

Zoning

Four distinct areas including eastern and southeastern residential area, a large central area, industrial area (northwest) and cemetery (southwest) can be seen on the range of hills formed at different periods (Mortazavi, 2007). In this respect, the archaeological site can be divided into four different zones in the total area of 151 hectares on the basis of distinct application in different parts of the hills and the historical period of the site formation (Figure 3).

Zone 1: (residential area): The area of this zone is more than 30 hectares. The most important architectural building in this zone dating to 2300 to 2100 BC located in the southeastern part of the hills with an area of 650 square meters. The burnt remains on the floor and ceiling can be well observed in the building and life or living in the city got finished through the destruction of the building. The building is known as the Burnt Palace and located in the eastern parts of the zone of the residential area in which the relics belong to the second and fourth period of culture (2800 to 2100 BC) of the settlement can be seen in the city.

Zone 2: (large central area): The zone is separated from the range of the hills by a hole from West, South and East and the oldest objects dating to 2700 BC have been found there. The area of this zone is about 20 hectares. The most important architectural building founded in this zone is the Monument (governing-administrative Monument) dating to 2500 BC located in the northern part of the zone and colorful pieces of broken pottery and stone on the surface of this zone are its special features.

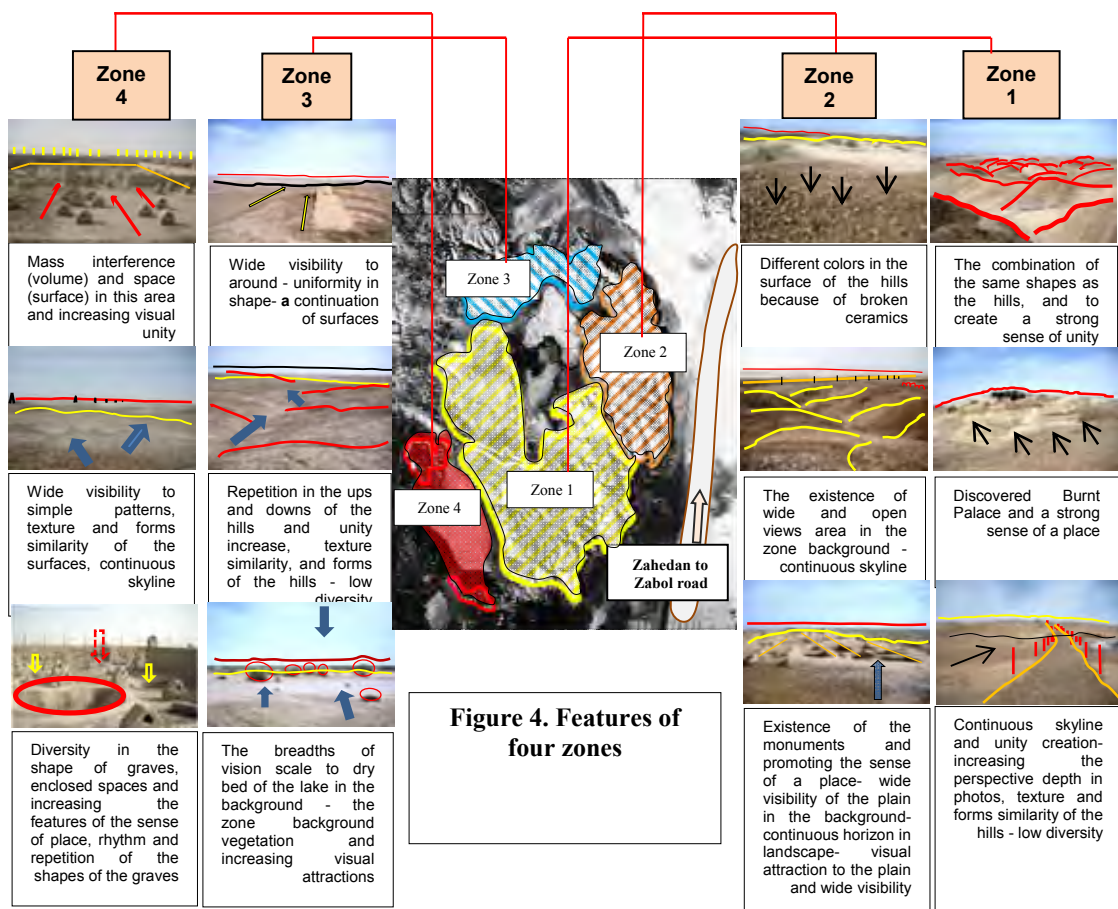
Zone 3: (industrial area): The zone is located in the northwest of the hills and its area is 25 hectares. The archaeological ruins founded in this zone are dating to 2500 BC. Clay sewer pipe in the trench are among the most important discovery in this zone. The industrial area in this zone and its great view to the plain landscape and the dry bed of the lake are among the most important discovery in this ancient site. This area is separated from the zone 4 by a hole.



Figure 2: the periods of artifacts based on Remote Sensing data and determining the ancient region borders (Mortazavi, 2007).



Figure 3: Zoning based on the formation of cities, similar spaces and deploying the applications during development (author, 2013).



Zone 4: (cemeteries area): The zone is located in the southwest of the Burnt City covered with sands and without any terrains, and its area is about 25 hectares. This part of the Burnt City Hills was studied by a team of archaeologists since 1972. This part of Burnt City Hills was generally divided into two parts, the North and South parts and the cemetery is located in the northern part in which the graves with various forms of burial is one of the most surprising attractions in this zone (Mortazavi, 2007). It should be noted that for the proposed area in the ancient-natural landscape no boundaries can be clearly marked on the Figure, and the borders are somewhat hypo.

Results

In general perspective, in the deserted road of Zabol to Zahedan, this archaeological site, hills continuity and visual attraction created by hills height and the structure of surrounding land Causes the two layers of foreground and background are inseparable from each other. Low to moderate variety of the elements, the existence of the same tissues and vast horizons caused increasing the spirit of the place in the overall landscape of the hills. Visual cues, such as hills, plains, desert plants and bushes (Tamarix and tamarisk) can be detectable in the overall perspective. Unity is seen in the generality of the landscape plans and visual forces along with the horizon directed by the observer to a wide range of plain increase the satisfaction and perception of beauty and the features of the sense of place by the observer. The predominant type of the landscape of the historical sites is of historical- natural type. In each zone some highlighted features can be seen as follow (Figure 4):

Zone 1: Wide visibility to around – ideal unity due to the presence of similar forms and tissues to the hills, low diversity of elements (shape, texture and color of the hills), Increased sense of place due to the effect of Burnt Palace caused the predominant type of landscape in this zone to be the historical type and most visitors paid attention to the founded ancient ruins and remains.

Zone 2: Promotion of the sense of place due to the exploration of the archeological sites in the northern and southern parts of the zone, increasing the visibility depth due to lack of enclosure and the same height of the hills, the presence of flat plains of Sistan in the most views in the background, continuous skyline, a panoramic view to the vast desert landscape and the other surrounding zones, great variety in terms of broken pottery and stone color across the hills and the desired unity between the components of the landscape in this zone Caused the creation of a type of natural - historical perspective in this and made tourists to spend more time visiting this zone.

Zone 3: a view of horizontal 180 degree to the plain and the dry bed of the lake and the depth of vast view and local vegetation (dry plants and tamarisk *Tamarix*) in the dry bed of the lake in the background along the horizon, continuous skyline, little variation in terms of uniformity and smoothness of the surface of the hills, ideal unity due to the shape similarity, textures and colors in the structures of the hills and poor sense of place (due to lack of explored items and poor visual communication with other zones) have caused the natural type to be predominant type of landscape in this area, and have made the only natural significant features including desert, dry bed of the lake, native vegetation in the background and wind blowing, hills erosion and accumulation of dunes and sand adjacent to the zone be of interest to visitors.

Zone 4: wide and panoramic view of the plains landscape and the lake bed and also the sparse vegetation of the plain in the background landscape of the zone, continuous skyline, the presence of ideal unity due to the flatness and similarity in texture and colors of the hills, increasing the diversity in the structure of the landscape, manifestation of the spirit of the place because of the more than 9 types of burials in the cemetery, and familiarity with people's beliefs of the afterlife in the third millennium BC in have caused a historical dominant type in the landscape of this zone. The possibility of visiting the exploring operation in the time of exploration by tourists is one of the strengths of this zone.

The findings show that the zones 2 and 4, with the three concepts (diversity, unity, sense of place) in the landscape structure are the most perfect zones in terms of visual quality. Besides evaluating the environmental and tourism potentials in each zone, based on the field investigations showed the zones 2 and 4 in the terms of environmental features, tourism and education had more favorable potentials than the other zones. Zone 1 and then zone 3 are respectively secondary priorities. In general, the lack of clear and designed direction to visit the antiquities, the milestones in each zone, lack of introducing and guidance signs in the archaeological site, and blowing the wind of 120 days in the summer and carrying sand and dust by the wind are the tourists limiting factor in the entire zone.

Discussion

The purpose of creating archaeological parks in addition to the protection of cultural heritage, familiarization of the culture, specific historical, archaeological and architectural values of human in a period of history in a country (Zifferero, 2008). Moreover, the archaeological parks are trying to introduce the ancient remains and antiquities in the environment, landscape, and context of their own nature. As a result, in this research according to the importance of the environment and landscape in creating archaeological parks, Simon Bell visual and aesthetic approach and visual analysis methods were used in the study of ancient archaeological sites in order to identify and evaluate the environment and landscape of archaeological site in Burnt City of Sistan. Hence, the

environment and landscape of each zone of the study was separately assessed. In this study, the visual effective features on the landscape of a place including diversity, unity and a sense of place were studied. Then, the potentials of the environment and tourism of each zone were separately studied. Accordingly, the guidelines and the factors needed to be strengthened in order to create an archaeological park in the ancient sites and each of the four zones of the study were identified:

In order to create an archaeological park in zone 1, it should be attempted to make tourists visit the ruins and explored antiquities. Also, in the planning process, Most aspects of education, research on how to live, how to build houses, architecture and materials used during the reconstruction of theoretical models to showcase the everyday life of the period, guidance panels and boards of current applications and strengthening the sense of place and history type in of the zone were applied more.

In zone 2, the three concepts (diversity, unity and a sense of place) have a positive role in shaping the overall structure of the landscape. Natural landscape of Sistan plain and dry bed of the lake in the background, wide and open view to the sites due to the lack of enclosure and same height of the hills have made the natural factors more important while on the move in this zone at different angles of the observer. Therefore, in order to create an archaeological park in this zone, it should be attempted to study explored antiquities in relation with the surrounding environment and landscape, and to create temporary routes and places to pause and think (like watching platforms) from the angles of the observer in relation to the perception of the natural-historical type of the zone (Figure 5).

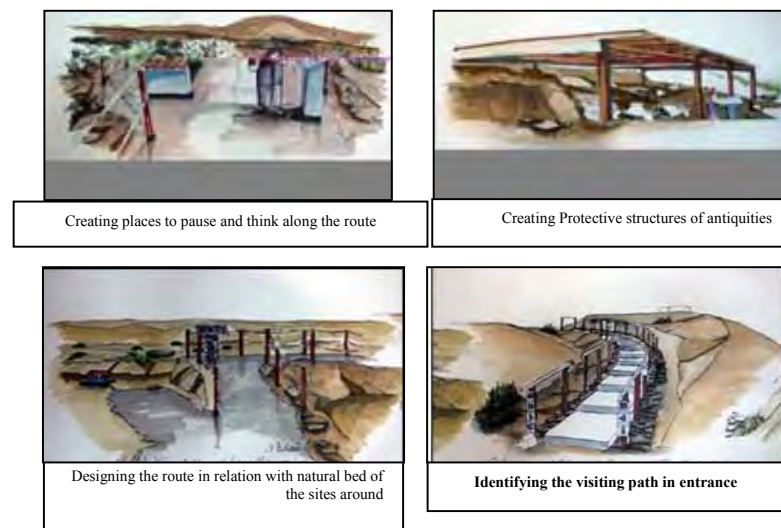


Figure 5 . Proposed sketches from spaces to pause and move in the project based on the principles of Archaeological Park

In order to improve the performance of zone 3 and to understand the role of natural factors (flat plains, lakes, and delta) in the formation of ancient civilizations, it is better to mark outstanding places in designing the routes in visual relation with the natural factors in the background as places to pause and observe. In zone 4, each of the three concepts (diversity, unity, sense of place) are in very good condition. The predominant type of this zone is historical (culture) type. in order to plan an archeological park in this zone, the sense of the current place should be improved through applying educational policies (introducing boards) and creating a path to visit and places to pause and think more along the routes in relation with the graves explored. In general, it can be said that ancient - natural landscape of the Burnt City has seen many changes from the third millennium BC

to the present. Obviously, these changes have occurred in the context of nature and at the same time and caused this ancient collection to be seen as a series of interconnected hills which are 12 to 18 meters above the surrounding ground levels.

In the present study, for better understanding of ancient collections and the ancient - natural landscape, the idea of clear direction to study the evolution of the city in history and on the hills in the zones was offered, so that the visitors get more familiar with the collections, landscape, and its surrounding nature through moving and pausing (in the specific routes from the entrance) in the site and visiting different zones. Hence, the following items are recommended to get the mentioned idea with respect to considering the potentials and limitations of ancient - natural landscape of Burnt City of Sistan:

- Conservation of antiquities and the use of protective structures by considering the determined boundaries.
- Designing an entrance consistent with the overall landscape of the ancient hills outside the ancient boundaries as a plan of the project.
- Leading the visitors in certain ways ending to the collection of ancient hills.
- Designing some spaces to watch the overall landscape of the hills at the beginning of the entrance.
- Provision of facilities such as parking, lounge (picnic), security, entrance building (in accordance with the texture and color of hills, and using local mud brick architecture model in the area) and green spaces (varieties resistant to drought and vehicles in region such as Tamarix and tamarisk) outside of the ancient area.
- Using local architecture and materials to construct the routes and facilities.
- Creating and designing a route from the entrance of the site to the entrance of the first zone with frequent sequences of motions and pauses (spatial openness along the straight route) in relation to the different angles of vision to a range of hills in order to further perception of the spirit features of the place by the observer.
- Designing a route by following the protection principles in all four zones based on the idea of evolution of the city in history and attention to historical and natural features of each zone (a wooden route with low height above the ground).
- Keeping visual communication in designing the route with the milestones of ancient sites and outstanding antiquities.
- Creating some places for visitors to pause, relax and watch the plan.
- Providing the visitors introducing boards to promote educational activities in each zone.
- Giving a program of visiting other nearby archeological sites and desert tours, holding some festivals on different occasions to promote cultural tourism activities.
- Using the potentials of cultural heritage sites (in 5 km) and the new city of Ramshar (in 10 km) to accommodate tourists and giving educational and research activities such as museums, and laboratories...

Conclusion

Generally, it can be said that the creating and designing archaeological parks is an interdisciplinary issue and needs the cooperation of various specialties. In order to introduce the ancient antiquities and archaeological sites the qualitative assessment of the environment, landscape, and the nature around archaeological sites along with plans and designs to create an archaeological park should be taken into the planners' and designers' considerations. Then, the idea of creating archaeological parks should be able to present specific historical, cultural, and local values to fulfill

educational goals and promote cultural tourism in the country along with maintaining archaeological sites and ancient antiquities.

References

- Ahmadpoor, A., Mehdiian Bahnemir, M., Mirzayikotnaeai, & M., Mohammadi, A. (2012). Analysis of the role of museums in the development of cultural tourism, case study: Museums in the east of Mazandaran province. *Tourism Planning and Development Journal*, 1, 105-128.
- Archaeological Survey of India (2002). Champaner – Pavagadh world heritage site nomination for inclusion on the UNESCO world heritage list, Prepared & Documented by HERITAGE TRUST, Supported by INTACH. p 55-80.
- Bittelli, M. (2008). Environmental assessment of an archaeological site for the development of archaeological park. Italy: University of Bologna press, p.11-19.
- Doswell, R. (1997). *Tourism, how effective management makes the differences*. London: I.B.Tauris, p. 6-7.
- Ebrahimzadeh, A., Kazemizadeh, Sh., & Iskandarisani, M. (2010). Strategic planning of tourism development, with emphasis on religious Tourism, case study: Qom. *Human Geography Research*, 76, 2.
- Fatimah, T., Kiyoko, K., T. & Adishakti, L., (2006). Borobudur – Recent history of its cultural perspective, toward the sustainable rural development as the perspective rehabilitation, paper presented at the forum unesco university and heritage 10th international seminar Culture Perspective in the 21st Century, Newcastle-upon-tyne.
- Kazemizad, J., & Aghaeai, V. (2010). The role of tourism in socio-economic development of the Sistan- Baluchistan province. the fourth international congress of geographers in the world of Islam.
- Khalilnejad, S.M., & Aminzadeh, B. (2011). Visual management strategies of the landscapes around on the way park of Khor and its surrounding areas in South Khorasan province. *Environmental Studies*, 2, 3, 1- 12.
- Gross, M., (1999). *Techniques, Materials and Trend in Open Air Interpretation in US National Parks*, Università di Sienna press, p. 483-495.
- Gross, M., & Zimmerman, R. (2002). *Interpretive Centers: Design, and Development of Nature and Visitor Center*, University of Wisconsin press, p. 121- 135.
- Gross, M. Zimmerman, R., & Buchholz, J. (2006). *Signs, Trails, and Wayside Exhibits. Connecting People and Places* . University of Wisconsin press. p 78
- Marchetti, N. (2008). From excavation strategies to archaeological parks", ARCHAIA Seminar. Italy: University of Bologna,. ([http://www .Daneprairie.com](http://www.Daneprairie.com))
- Mills, N. (1999). From Archaeological Sites to the Creation of Thematic Museums and Parks. An Overview from Britain. Università di Sienna, p 297-311.
- Mortazavi, M. (2007). A systematic review of the archeology in Burnt City. Zahedan: University of Sistan and Baluchestan, Faculty of Humanities, Department of Archaeology. Pp. 27 -30.
- Musso, S. (2008). Low impact restoration techniques, Coverings and Fixed devices in an archaeological park: a study case at Tilmen Hoyuk in Turkey: In Marchetti, n., Thuesen, I. (eds), ARCHAIA. Case studies on Research Planning, Characterization, Conservation and Management in Archaeological Sites, Oxford, pp. 319-330.
- Ranjbaran, B., & Zahedi, M. (2009). *Recognizing tourism*, fifth edition, Isfahan: Publication of Charbagh, pp.46-48.
- Richards, G. (2007). *Cultural Tourism Global and Local Perspectives*, the Haworth Hospitality Press, p. 126.

- Syedsajjadi, S.M, (2003). Brief Guides of Sistan antiquities. First edition. Zahedan: Publication of Sistan and Baluchestan Management and Planning Organization.
- Saei, A., Naigi, M., & Rezaei, (2010). The relationship between advertising and attracting cultural tourism in Iran, case study: foreign cultural tourists in Isfahan. *Encyclopedia of the Social Sciences*, 4, 2-10.
- Thuesen, I. (2008) . An international agenda for agreeing a standard policy of conservation at archaeological sites ,ARCHAIA Seminar, University of Bologna, Italy.
- Zifferero, A. (2008). From Archaeological Parks to the Enhancement of Archaeological Perspective: New Direction in Italian Heritage Management .Roma: Dipartimento di Archaeologia e Storia delle Arti, University degli studi di siena press, pp. 1-5.